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Fibre Box Industry
1983 Annual Report

Fibre Box Association

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This 1983 Annual Report of the Fibre Box Industry is the 43rd in the series published by the Fibre Box Association. An annual voluntary census of non-member information is combined with audited data from member box makers to provide accurate data on the corrugated box industry. All shipments are of finished products; sales of sheets by converters to sheet plants are deducted. Additional data for this report has been provided by the American Paper Institute and the Bureau of Labor Statistics of the U.S. Department of Labor.

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FINALLY!!!

After four years of essentially flat production, corrugated shipments in 1983 finally exceeded 1979 shipments. Not by much, but enough for it to become the record year for the industry. The comparison to 1982 was more dramatic. 1983 shipments were up 7.4% over 1982.Early indications, backed by economic predictions, are that 1984 will be another year of growth.

All sections of the country shared in the 1983 growth. As usual, some areas had higher percentage increases than others, but all were positive. The Northeastern area grew 4.7% and the Southeast 11.0%. The other four areas grew at rates between the two and the average was 7.4%.

The pattern of end use did not vary appreciably from prior years. The food and beverage industries are far and away the largest users of corrugated boxes (38.0%) with the paper industry (15.0%) a distant second.

Despite the increase in volume, the number of employees did not change appreciably from 1982 to 1983 which meant a significant increase in productivity. This was due, in part, to a more effective work force and, in part, to heavy investment by many companies in new equipment - continuous run corrugators, direct drive knives, splicers, stackers and more efficient down stream presses and die cutters. The average converting plant in 1979 produced 402 million square feet, while in 1983, it produced 430 million square feet.

This upturn is a major reason for the trend, established in the last few years, of a reduction in the number of plants. The year 1983 ended with nine fewer converting plants than it started but with three more sheet plants at year end than in January.

The foreseeable future looks good for the industry. Corrugated production correlates quite closely with the nation's industrial production and all indications are that the current upturn in the economy will continue into 1985 and beyond. Corrugated consumption will grow with the country's growth in GNP.

We are looking to the future with real optimism.

Monty Rosenkranz

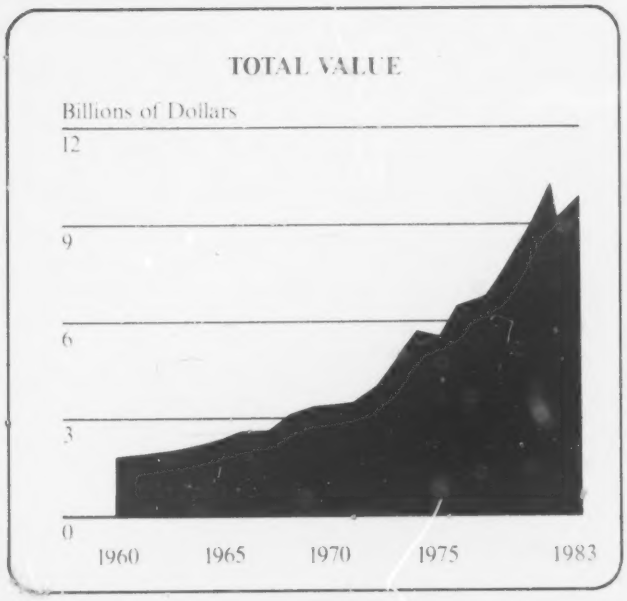
M. Rosenkranz
President

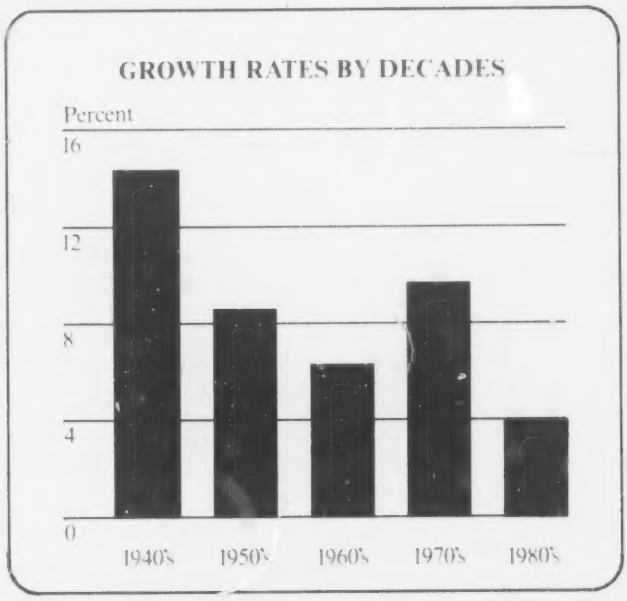
Thomas J. Muldoon

T. J. Muldoon
Executive Vice President

Value

INDUSTRY VALUE OF SHIPMENTS



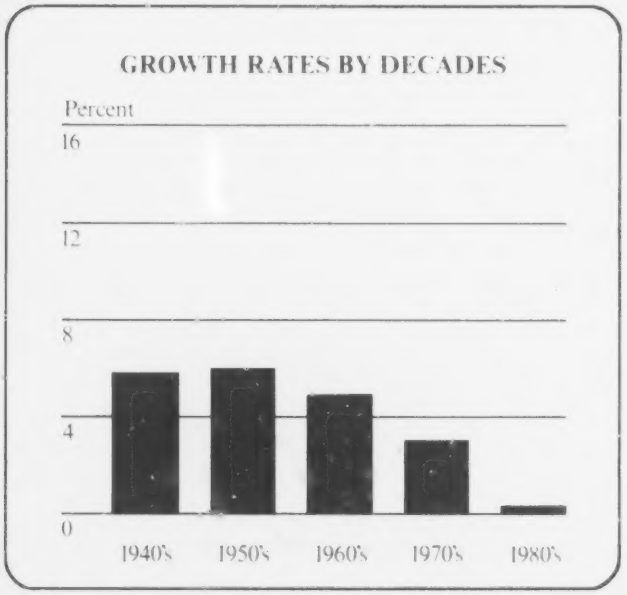


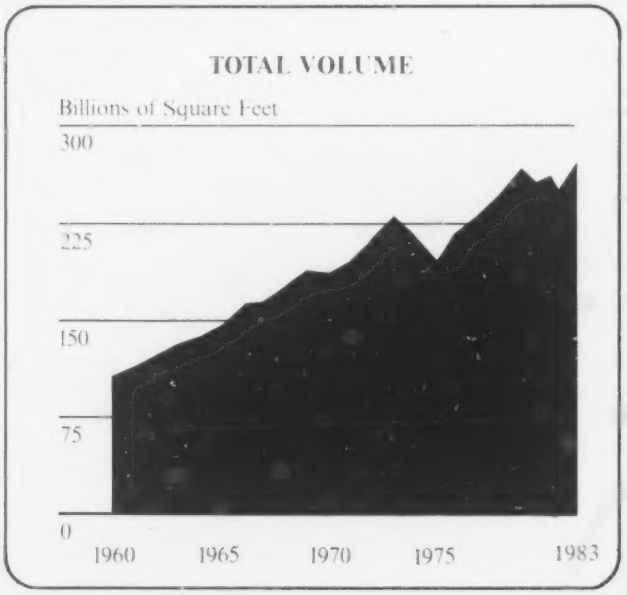
Billions of Dollars

YEAR	TOTAL	CORRUGATED	SOLID FIBRE	YEAR TO YEAR GROWTH
1960	$1,791,171,100	$1,746,525,600	$44,645,500	- 0.3%
1961	1,820,090,000	1,777,068,100	43,021,900	+ 1.6
1962	2,000,415,600	1,956,573,300	43,842,300	+ 9.9
1963	2,067,429,400	2,027,179,900	40,249,500	+ 3.3
1964	2,213,855,300	2,175,406,500	38,448,800	+ 7.1
1965	2,406,758,600	2,367,541,900	39,216,700	+ 8.7
1966	2,730,785,600	2,673,737,100	57,048,500	+ 13.5
1967	2,814,803,600	2,761,635,200	53,168,400	+ 3.1
1968	3,043,600,900	2,990,444,200	53,156,700	+ 8.1
1969	3,320,521,800	3,268,934,500	51,587,300	+ 9.1
1970	3,341,044,100	3,298,364,600	42,679,500	+ 0.6
1971	3,463,680,200	3,422,262,100	41,418,100	+ 3.7
1972	3,959,924,500	3,919,862,900	40,061,600	+ 14.3
1973	4,862,056,300	4,815,486,600	46,569,700	+ 22.8
1974	5,792,984,900	5,742,301,300	50,683,600	+ 19.1
1975	5,623,765,200	5,578,612,500	45,152,700	- 2.9
1976	6,443,938,300	6,395,870,800	48,067,500	+ 14.6
1977	6,741,744,100	6,691,170,000	50,574,100	+ 4.6
1978	7,260,097,300	7,204,311,000	55,786,300	+ 7.7
1979	8,407,894,000	8,344,624,600	63,269,400	+ 15.8
1980	9,075,381,800	9,010,411,600	64,970,200	+ 7.9
1981	10,019,521,200	9,956,771,000	62,750,200	+ 10.4
1982	9,343,619,900	9,278,989,700	64,630,200	- 6.7
1983	9,845,258,200	9,778,198,700	67,059,500	+ 5.4

Definitions are shown on page 16.

INDUSTRY SHIPMENTS





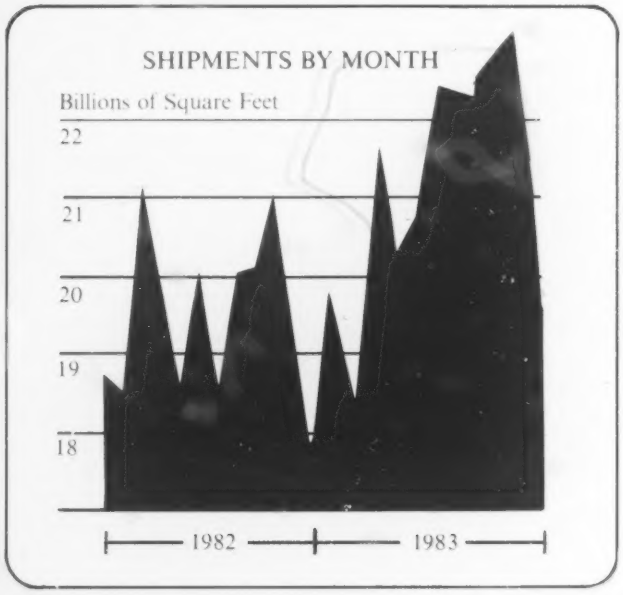
Billions of Square Feet

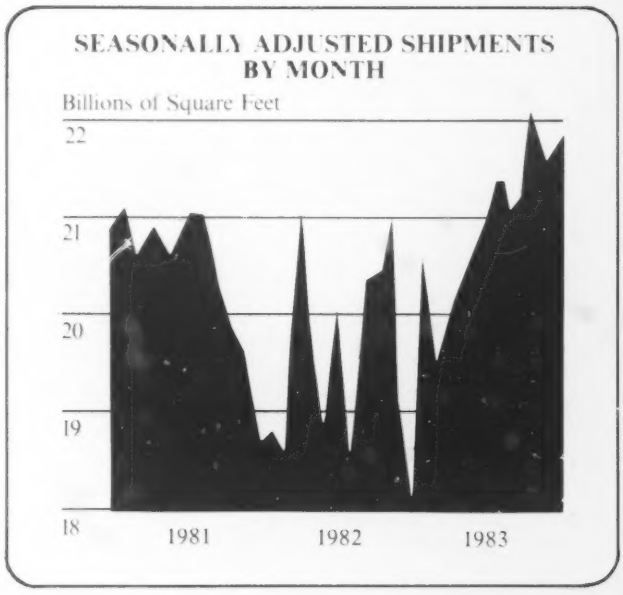
YEAR	TOTAL	CORRUGATED	SOLID FIBRE	YEAR TO YEAR GROWTH
1960	108.931	107.676	1.255	1.0
1961	114.561	113.365	1.196	+ 5.2
1962	122.181	120.994	1.187	+ 6.7
1963	128.663	127.543	1.120	+ 5.3
1964	137.261	136.199	1.062	+ 6.7
1965	148.471	147.393	1.078	+ 8.2
1966	160.452	158.997	1.455	+ 8.1
1967	162.596	161.212	1.384	+ 1.3
1968	173.814	172.361	1.453	+ 6.9
1969	185.652	184.280	1.372	+ 6.8
1970	184.865	183.761	1.104	- 0.4
1971	191.832	190.756	1.076	+ 3.8
1972	211.926	210.880	1.046	+ 10.5
1973	228.052	226.984	1.068	+ 7.6
1974	216.072	215.119	.953	5.3
1975	194.329	193.573	.756	10.1
1976	216.371	215.565	.806	+ 11.3
1977	227.198	226.360	.838	+ 5.0
1978	243.898	242.999	.899	+ 7.4
1979	250.643	249.701	.942	+ 2.8
1980	241.377	240.490	.887	- 3.7
1981	246.152	245.331	.821	+ 2.0
1982	235.185	234.306	.879	- 4.5
1983	252.539	251.618	.921	+ 7.4

Definitions are shown on page 16.

INDUSTRY SHIPMENTS

BY MONTH AND QUARTER



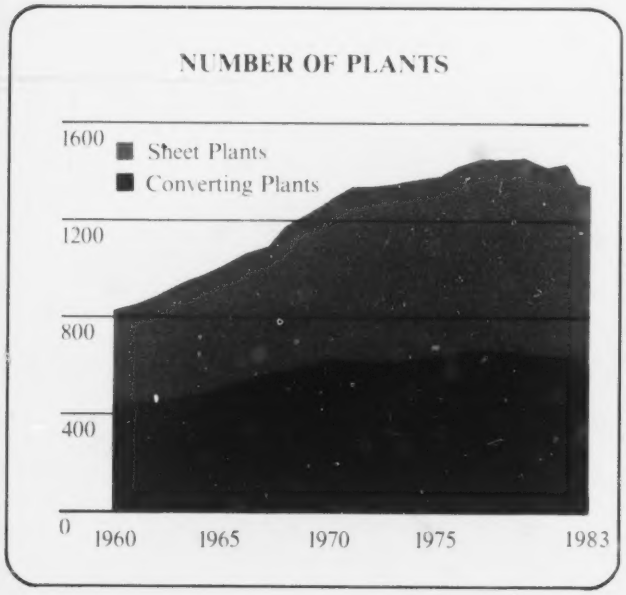


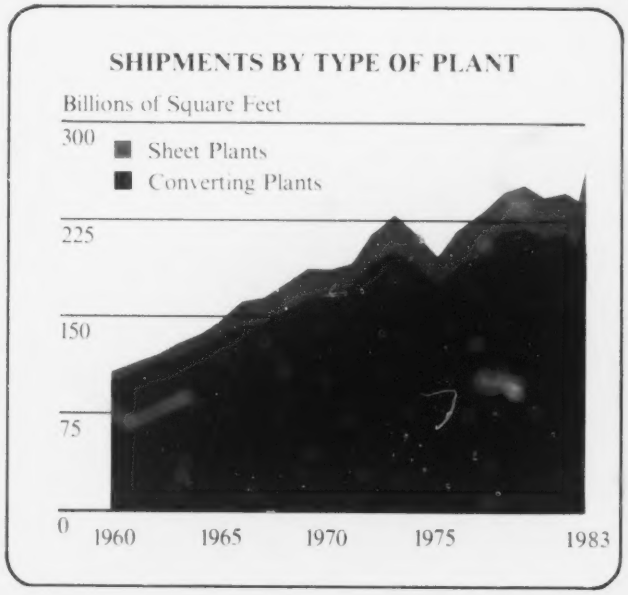
MONTH	1981			1982			1983			Seas. Adjustment
	Avg. Week	Actual	Seas. Adjusted	Avg. Week	Actual	Seas. Adjusted	Avg. Week	Actual	Seas. Adjusted	
January	4.695	21.128	20.927	4.360	18.892	19.490	4.597	19.919	20.721	96.128
February	4.990	19.959	21.095	4.672	18.690	19.776	4.640	18.562	19.627	94.572
March	4.998	21.656	20.627	4.699	21.147	19.561	4.851	21.828	20.066	108.779
1st Quarter	4.889	62.743	62.438	4.576	58.729	58.480	4.699	60.308	60.099	100.348
April	4.982	21.590	20.998	4.605	19.957	19.321	4.713	20.421	20.577	99.241
May	4.601	19.938	20.779	4.333	18.777	19.792	4.781	20.719	20.996	98.683
June	4.881	21.151	20.639	4.635	20.084	19.554	5.080	22.013	21.420	102.770
2nd Quarter	4.822	62.680	62.385	4.524	58.818	58.570	4.858	63.154	62.871	100.450
July	4.602	20.710	21.164	4.150	18.677	19.595	4.520	19.588	21.402	91.526
August	4.800	20.801	21.025	4.722	20.462	19.825	5.043	22.692	21.191	107.084
September	4.905	21.257	20.356	4.765	20.650	19.756	5.154	22.335	21.259	105.059
3rd Quarter	4.767	62.767	62.475	4.541	59.788	59.318	4.907	64.615	63.982	100.990
October	4.902	22.058	19.925	4.852	21.025	19.791	5.436	23.557	22.385	105.236
November	4.396	18.317	19.693	4.426	19.179	19.784	4.853	21.032	21.659	97.106
December	3.908	17.587	18.761	3.921	17.646	18.894	4.416	19.873	21.984	90.396
4th Quarter	4.402	57.962	58.806	4.394	57.850	58.823	4.896	64.462	65.695	98.123
Year	4.734	246.152		4.523	235.185		4.857	252.539		

Definitions are shown on page 16.

INDUSTRY SHIPMENTS

BY TYPE OF PLANT



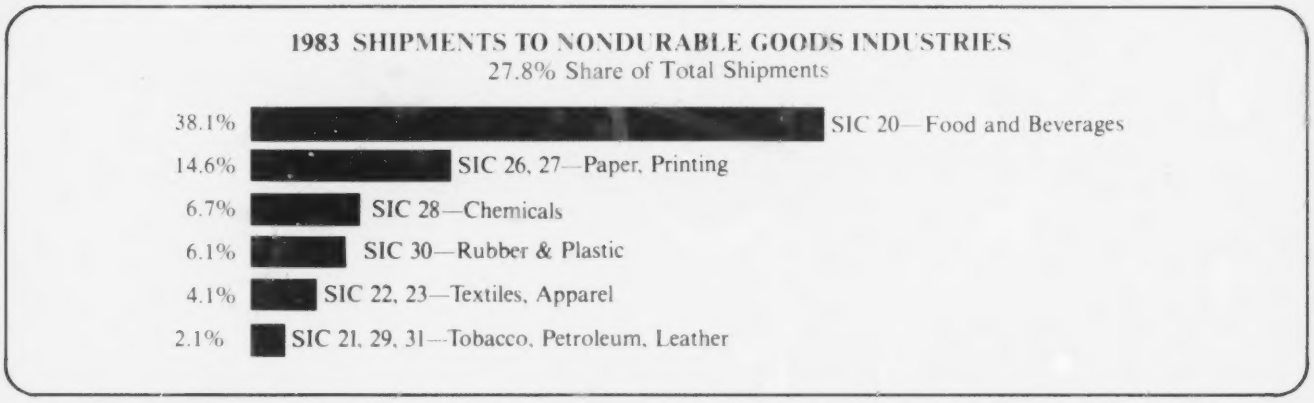


YEAR	TOTAL		CONVERTERS			SHEET PLANTS		
	Billions of Square Feet	Number of Plants	Billions of Square Feet	Percent of Total	Number of Plants	Billion of Square Feet	Percent of Total	Number of Plants
1960	108.931	812	98.991	90.9	428	9.940	9.1	384
1961	114.561	848	103.875	90.7	433	10.686	9.3	415
1962	122.181	881	109.309	89.5	443	12.872	10.5	438
1963	128.663	928	114.345	88.9	459	14.318	11.1	469
1964	137.261	967	121.531	88.5	463	15.730	11.5	504
1965	148.471	1,011	130.983	88.2	498	17.488	11.8	513
1966	160.452	1,065	140.946	87.8	519	19.506	12.2	546
1967	162.596	1,098	143.200	88.1	548	19.396	11.9	550
1968	173.814	1,184	152.497	87.7	578	21.317	12.3	606
1969	185.652	1,236	163.232	87.9	604	22.420	12.1	632
1970	184.865	1,294	163.230	88.3	623	21.635	11.7	671
1971	191.832	1,323	168.870	88.0	615	22.962	12.0	708
1972	211.926	1,324	184.452	87.0	614	27.474	13.0	710
1973	228.052	1,330	198.646	87.1	607	29.406	12.9	723
1974	216.072	1,358	189.015	87.5	619	27.057	12.5	739
1975	194.329	1,385	170.635	87.8	634	23.694	12.2	751
1976	216.371	1,427	188.694	87.2	645	27.677	12.8	782
1977	227.198	1,450	197.311	86.8	654	29.887	13.2	796
1978	243.898	1,449	211.661	86.8	654	32.237	13.2	795
1979	250.643	1,460	217.105	86.6	649	33.538	13.4	811
1980	241.377	1,422	210.868	87.4	633	30.509	12.6	789
1981	246.152	1,427	214.971	87.3	631	31.181	12.7	796
1982	235.185	1,376	206.799	87.9	623	28.386	12.1	753
1983	252.539	1,370	221.652	87.8	614	30.887	12.2	756

Definitions are shown on page 16.

SHIPMENTS

BY END USE INDUSTRY



NONDURABLE GOODS

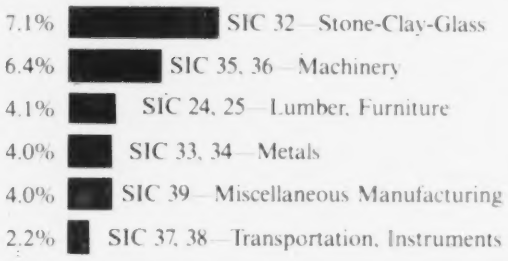
Percent of Square Footage Shipped by Standard Industrial Classification of Customers

MAJOR GROUP*	MANUFACTURING INDUSTRIES	1981 17 Companies 242 Plants 42.8%	1982 22 Companies 304 Plants 47.3%	1983 24 Companies 357 Plants 54.4%
20	Food and Kindred Products (except 201, 202, 203, 205, 207, 208 and Fresh Fruits and Vegetables)	7.3%	8.8%	8.4%
201	Meat Products	6.5	6.7	7.3
202	Dairy Products	2.7	2.6	2.6
203	Canning and Preserving Fruits, Vegetables, and Sea Foods	6.3	6.5	6.3
205	Bakery Products	1.9	1.9	1.9
206	Confectionery and Related Products	1.3	1.4	1.4
208	Beverage Industries	4.0	3.8	4.1
950**	Fresh Fruits and Vegetables	5.7	5.9	6.1
		35.5%	37.6%	38.1%
21	Tobacco Manufactures	.5	.7	.7
22	Textile Mill Products (except 227)	2.2	2.1	2.2
227	Floor Covering Mills	.1	.1	.2
		2.3	2.2	2.4
23	Apparel and Other Finished Products made from Fabrics and Similar Materials	1.6	1.7	1.7
26	Paper and Allied Products	10.9	11.4	12.9
27	Printing, Publishing, and Allied Industries (except 273)	1.4	1.3	1.3
273	Books	.4	.4	.4
		1.8	1.7	1.7
28	Chemicals and Allied Products (except 282, 283, 284, and 285)	1.5	1.8	1.7
282	Plastics Materials and Synthetic Resins, Synthetic Rubber, Synthetic and Other Man-Made Fibers, Except Glass	1.3	1.2	1.3
283	Drugs	.7	.6	.6
284	Soap, Detergents and Cleaning Preparations, Perfumes, Cosmetics and Other Toilet Preparations	2.8	2.8	2.7
285	Paints, Varnishes, Lacquers, Enamels and Allied Products	.3	.4	.4
		6.6	6.6	6.7
29	Petroleum Refining and Related Industries (except 295)	.8	.9	.8
295	Paving and Roofing Materials	.1	.1	.1
		.9	1.0	.9
30	Rubber and Miscellaneous Plastics Products (except 307)	.9	1.3	1.1
307	Miscellaneous Plastics Products	5.2	5.3	5.0
		6.1	6.8	6.1
31	Leather and Leather Products	.4	.4	.5
	Sub-Total, Nondurable Goods	66.6	70.1	71.7

*Standard Industrial Classification. **This number was arbitrarily assigned; not in accordance with Standard Industrial Classification Manual.

The sample as reported here, based on the number of companies indicated in the column headings, will not conform exactly to a complete analysis of sales. The percentages shown should be considered as indicators and not exact proportions. Differences in percentages from year to year can be caused by changes in the list of participating companies. Shipments to sheet plants and jobbers are not included. Companies included in the tabulation operate plants in all areas of the country.

1983 SHIPMENTS TO DURABLE GOODS INDUSTRIES
71.7% Share of Total Shipments


7.1% SIC 32—Stone-Clay-Glass
6.4% SIC 35, 36—Machinery
4.1% SIC 24, 25—Lumber, Furniture
4.0% SIC 33, 34—Metals
4.0% SIC 39—Miscellaneous Manufacturing
2.2% SIC 37, 38—Transportation, Instruments

DURABLE GOODS

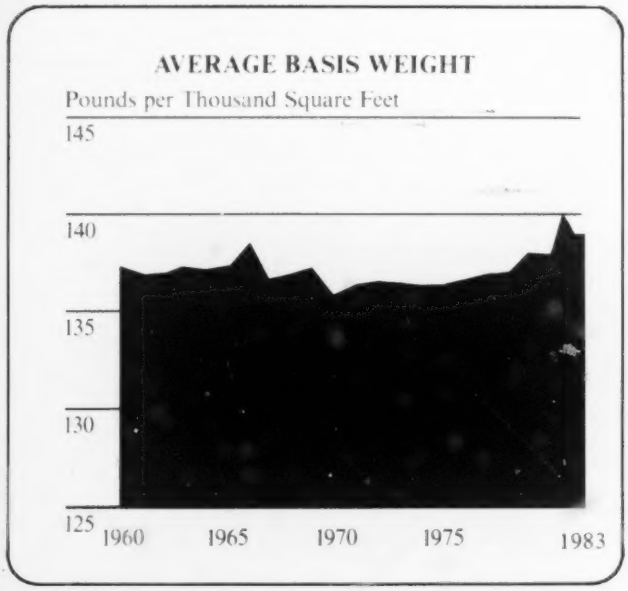
Percent of Square Footage Shipped by Standard Industrial Classification of Customers

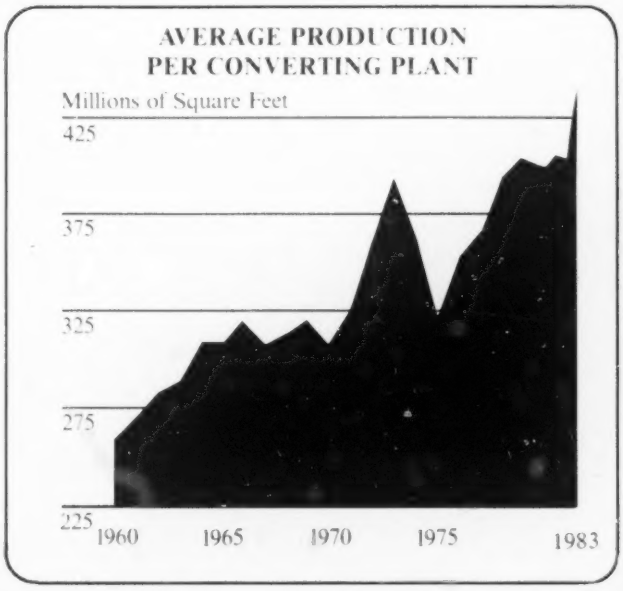
MAJOR GROUP*	MANUFACTURING INDUSTRIES	1981 17 Companies 282 Plants 42.8%	1982 22 Companies 304 Plants 47.3%	1983 24 Companies 357 Plants 54.4%
24	Lumber and Wood Products, Except Furniture	.9%	.9%	1.0%
25	Furniture and Fixtures (except 251)	1.3%	1.3%	1.4%
251	Household Furniture	2.2 — 3.5	2.0 — 3.3	1.7 — 3.1
32	Stone, Clay, and Glass Products (except 322, 326, and 329)	1.3	1.4	1.1
322	Glass and Glassware, Pressed or Blown	9.0	8.0	5.3
326	Pottery and Related Products	.3	.2	.3
329	Abrasive, Asbestos, and Misc. Nonmetallic Mineral Products	.4 — 11.0	.3 — 9.9	.4 — 7.1
33	Primary Metal Industries	.6	.6	.7
34	Fabricated Metal Products, Except Ordnance, Machinery and Transportation Equipment (except 341)	2.9	2.7	3.0
341	Metal Cans	.3 — 3.2	.3 — 3.0	.3 — 3.3
35	Machinery, Except Electrical (except 358)	1.8	1.6	1.5
358	Service Industry Machines	.4 — 2.2	.3 — 1.9	.4 — 1.9
36	Electrical Machinery, Equipment and Supplies (except 363, 364, 365 and 366-367)	1.0	1.2	1.1
363	Household Appliances	1.8	1.5	1.9
364	Electric Lighting and Wiring Equipment	.9	.8	.8
365	Radio and TV Receiving Sets, Except Communication Types	.4	.4	.3
366-367	Communication Equipment and Electronic Components and Accessories	.5 — 4.6	.4 — 4.3	.4 — 4.5
37	Transportation Equipment (except 371)	.2	.2	.2
371	Motor Vehicles and Motor Vehicle Equipment	1.7 — 1.9	1.4 — 1.6	1.3 — 1.5
38	Professional, Scientific, and Controlling Instruments, Photographic and Optical Goods, Watches and Clocks	.8	.8	.7
39	Miscellaneous Manufacturing Industries (except 394)	3.0	2.0	2.9
394	Toys, Amusement, Sporting and Athletic Goods	1.2 — 4.2	1.1 — 3.1	1.1 — 4.0
	Sub-Total, Durable Goods	32.9	29.4	27.8

	Sub-Total, Durable Goods	32.9	29.4	27.8
	Sub-Total, Nondurable Goods	66.6	70.1	71.7
42	Motor Freight Transportation and Warehousing	.4	.4	.4
90	Government	.1	.1	.1
	TOTAL	100.0%	100.0%	100.0%

*Standard Industrial Classification

INDUSTRY CORRUGATED PRODUCTION





BY TYPE OF BOARD

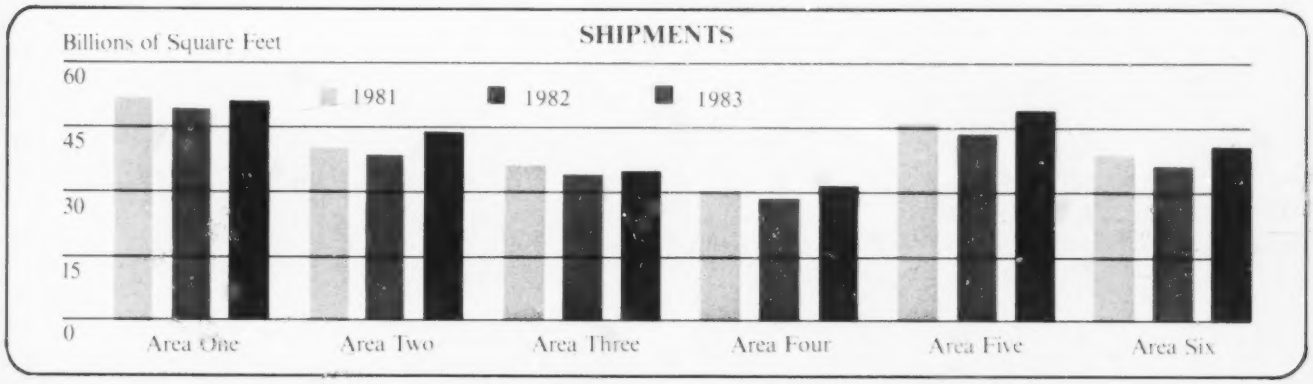
Billions of Square Feet

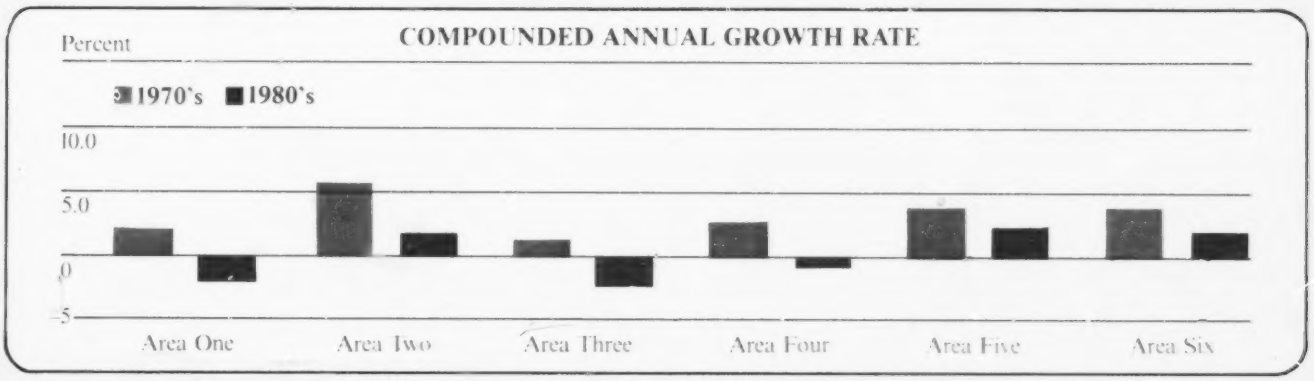
YEAR	Single Face	% Of Total	Single Wall	% Of Total	Double & Triple Wall	% Of Total	Total
1960	1.648	1.5%	104.206	93.1%	6.063	5.4%	111.917
1961	1.486	1.3	110.095	93.1	6.607	5.6	118.188
1962	1.416	1.1	116.879	92.9	7.503	6.0	125.798
1963	1.453	1.1	123.037	92.6	8.372	6.3	132.862
1964	1.390	1.0	131.868	92.5	9.224	6.5	142.482
1965	1.400	0.9	141.941	92.4	10.231	6.7	153.572
1966	1.594	1.0	151.593	91.7	12.025	7.3	165.212
1967	1.569	0.9	154.918	92.1	11.807	7.0	168.294
1968	1.549	0.9	165.937	91.8	13.278	7.3	180.764
1969	1.592	0.8	177.426	91.7	14.571	7.5	193.589
1970	1.548	0.8	177.087	91.9	14.105	7.3	192.740
1971	1.461	0.7	183.775	91.7	15.119	7.6	200.355
1972	1.567	0.7	200.902	91.3	17.641	8.0	220.110
1973	1.490	0.6	216.841	90.9	20.196	8.5	238.527
1974	1.492	0.7	203.449	90.8	19.154	8.5	224.095
1975	1.166	0.6	186.172	91.6	15.892	7.8	203.230
1976	1.305	0.6	207.880	91.2	18.633	8.2	227.818
1977	1.216	0.5	217.184	91.0	20.401	8.5	238.801
1978	1.265	0.5	232.827	90.8	22.309	8.7	256.401
1979	1.166	0.4	236.670	90.7	23.236	8.9	261.072
1980	1.144	0.5	229.054	90.9	21.741	8.6	251.939
1981	1.126	0.5	229.808	90.8	22.098	8.7	253.032
1982	1.188	0.5	224.180	91.0	20.921	8.5	246.289
1983	1.232	0.5	240.302	90.0	22.669	8.6	264.203

Definitions are shown on page 16.

INDUSTRY SHIPMENTS

BY AREA





Millions of Square Feet

YEAR	AREA 1		AREA 2		AREA 3		AREA 4		AREA 5		AREA 6	
	Total	% of Industry	Total	% of Industry	Total	% of Industry	Total	% of Industry	Total	% of Industry	Total	% of Industry
1960	29,704	27.3	11,044	10.1	23,317	21.4	15,749	14.5	14,948	13.7	14,172	13.0
1961	30,574	26.7	12,083	10.6	23,759	20.7	16,539	14.4	16,192	14.1	15,412	13.5
1962	32,129	26.3	13,225	10.8	25,170	20.6	18,071	14.8	17,109	14.0	16,478	13.5
1963	33,723	26.2	14,209	11.0	26,562	20.6	18,730	14.6	17,955	14.0	17,484	13.6
1964	35,310	25.7	15,545	11.3	28,385	20.7	20,263	14.8	19,155	14.0	18,604	13.5
1965	37,710	25.4	17,419	11.7	30,938	20.9	21,843	14.7	20,663	13.9	19,898	13.4
1966	39,777	24.8	19,314	12.0	32,882	20.5	22,862	14.3	23,033	14.3	22,586	14.1
1967	39,949	24.6	20,483	12.6	32,363	19.9	22,703	13.9	24,223	14.9	22,875	14.1
1968	42,162	24.3	22,278	12.8	34,430	19.8	24,016	13.8	26,347	15.2	24,581	14.1
1969	44,378	23.9	24,707	13.3	36,320	19.5	25,186	13.6	28,358	15.3	26,703	14.4
1970	44,038	23.8	25,040	13.6	35,194	19.0	24,820	13.4	28,998	15.7	26,774	14.5
1971	44,813	23.4	27,163	14.2	36,374	18.9	25,877	13.5	30,248	15.8	27,356	14.2
1972	48,382	22.8	30,957	14.6	40,248	19.0	28,513	13.5	33,788	15.9	30,038	14.2
1973	51,019	22.4	33,561	14.7	42,689	18.7	30,760	13.5	37,083	16.3	32,941	14.4
1974	48,537	22.5	31,599	14.6	39,146	18.1	28,944	13.4	35,099	16.2	32,747	15.2
1975	42,183	21.7	29,403	15.1	34,134	17.6	25,541	13.2	32,092	16.5	30,976	15.9
1976	46,697	21.6	32,809	15.2	38,326	17.7	28,471	13.2	36,220	16.7	33,848	15.6
1977	48,301	21.3	35,187	15.5	39,845	17.5	29,611	13.0	38,646	17.0	35,609	15.7
1978	52,275	21.4	38,796	15.9	41,433	17.0	31,368	12.9	41,753	17.1	38,273	15.7
1979	53,322	21.3	41,586	16.6	41,071	16.4	31,819	12.7	43,175	17.2	39,670	15.8
1980	50,551	20.9	41,284	17.1	36,912	15.3	30,147	12.5	42,867	17.8	39,616	16.4
1981	50,100	20.4	41,651	16.9	37,618	15.3	30,032	12.2	45,169	18.3	41,582	16.9
1982	48,006	20.4	39,744	16.9	34,263	14.6	28,795	12.2	44,408	18.9	39,969	17.0
1983	50,263	19.9	44,108	17.5	37,194	14.7	31,249	12.4	47,442	18.8	42,283	16.7

Definitions are shown on page 16.

AREA SHIPMENTS

MILLIONS OF SQUARE FEET

BY QUARTER

	AREA ONE			AREA TWO			AREA THREE		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
1st Quarter	12,767.3	11,896.6	12,148.2	10,716.4	9,981.0	10,538.4	9,823.4	8,514.0	8,872.4
2nd "	12,638.5	11,799.1	12,577.3	10,766.8	10,144.3	11,130.7	9,707.3	8,408.3	9,121.5
3rd "	12,669.1	12,106.4	12,764.6	10,439.3	9,743.0	11,030.9	9,623.4	8,831.6	9,626.1
4th "	12,024.7	12,113.6	12,772.8	9,728.5	9,875.3	11,407.6	8,463.8	8,509.0	9,574.4

BY MONTH

January	4,198.9	3,836.5	3,968.8	3,661.4	3,200.9	3,461.7	3,283.6	2,741.2	2,897.8
February	4,156.7	3,798.6	3,630.1	3,379.7	3,191.4	3,310.1	3,113.4	2,716.5	2,750.4
March	4,411.7	4,351.5	4,549.4	3,675.3	3,588.8	3,766.5	3,426.4	3,056.2	3,224.2
April	4,293.3	3,911.9	3,976.6	3,690.1	3,498.1	3,663.5	3,288.3	2,815.7	2,973.9
May	3,995.3	3,724.8	4,124.7	3,482.0	3,261.4	3,664.0	3,123.4	2,697.7	2,980.7
June	4,349.9	4,162.4	4,476.0	3,594.7	3,384.9	3,803.2	3,295.6	2,894.9	3,167.0
July	4,015.1	3,576.4	3,715.6	3,511.3	3,105.5	3,373.8	3,102.2	2,652.3	2,788.4
August	4,317.9	4,176.0	4,494.8	3,433.4	3,324.8	3,886.7	3,209.6	3,046.6	3,432.4
September	4,336.2	4,353.9	4,554.2	3,494.6	3,312.8	3,770.4	3,311.5	3,132.6	3,405.4
October	4,589.2	4,492.7	4,578.1	3,576.6	3,422.7	4,024.3	3,308.0	3,107.6	3,474.0
November	3,798.3	3,967.4	4,152.5	3,118.0	3,334.8	3,739.0	2,697.1	2,869.2	3,189.6
December	3,637.2	3,653.4	4,042.2	3,034.0	3,117.8	3,644.4	2,458.7	2,532.2	2,910.8
TOTAL	50,099.7	48,005.7	50,262.9	41,651.0	39,743.6	44,107.5	37,617.8	34,262.8	37,194.5

BY AVERAGE WEEK

January	933.1	885.4	915.9	813.6	738.7	798.9	729.7	632.6	668.7
February	1,039.2	949.7	907.5	844.9	797.8	827.5	778.4	679.1	687.6
March	1,018.1	967.0	1,011.0	848.1	797.5	837.0	790.7	679.2	716.5
April	990.8	902.8	917.7	851.6	807.2	845.4	758.8	649.8	686.3
May	922.0	859.6	951.8	803.5	752.[illegible]	845.5	720.8	622.5	687.9
June	1,003.8	960.6	1,032.9	829.5	781.1	877.7	760.5	668.1	730.8
July	892.2	794.8	857.4	780.3	690.1	778.6	689.4	589.4	643.5
August	996.4	963.7	998.8	792.3	767.3	863.7	740.7	703.1	762.7
September	1,000.7	1,004.8	1,051.0	806.4	764.5	870.1	764.2	722.9	785.9
October	1,019.8	1,036.8	1,056.5	794.8	789.9	928.7	735.1	717.1	801.7
November	911.6	915.6	958.3	748.3	769.6	862.8	647.3	662.1	736.1
December	808.3	811.9	898.3	674.2	692.8	809.9	546.4	562.7	646.8
Average	963.5	923.2	966.6	801.0	764.3	848.2	723.4	658.9	715.3

Definitions are shown on page 16.

AREA SHIPMENTS

MILLIONS OF SQUARE FEET

BY QUARTER

	AREA FOUR			AREA FIVE			AREA SIX		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
1st Quarter	7,711.5	7,171.1	7,563.4	11,543.4	11,384.7	11,518.8	10,181.2	9,691.7	9,667.0
2nd "	7,494.1	7,120.8	7,733.8	11,301.6	11,146.1	11,761.6	10,771.1	10,198.9	10,828.7
3rd "	7,700.9	7,416.7	8,109.5	11,436.1	11,142.1	11,962.7	10,898.3	10,548.1	11,121.4
4th "	7,125.3	7,086.6	7,842.2	10,887.8	10,735.7	12,198.6	9,731.8	9,530.0	10,666.2

BY MONTH

January	2,596.2	2,264.4	2,484.7	3,949.8	3,639.6	3,834.5	3,438.6	3,209.6	3,271.4
February	2,481.4	2,315.1	2,350.7	3,670.0	3,637.3	3,560.7	3,157.5	3,031.1	2,959.6
March	2,633.9	2,591.6	2,728.1	3,923.6	4,107.8	4,123.6	3,585.1	3,451.0	3,436.0
April	2,567.0	2,378.9	2,480.6	3,842.7	3,781.6	3,806.7	3,909.0	3,570.5	3,519.9
May	2,402.9	2,286.8	2,552.3	3,630.1	3,567.0	3,853.1	3,304.5	3,238.8	3,544.7
June	2,524.2	2,455.1	2,700.9	3,828.8	3,797.5	4,101.8	3,557.6	3,389.6	3,764.1
July	2,511.1	2,267.4	2,390.0	3,758.9	3,574.9	3,681.0	3,810.9	3,500.1	3,639.2
August	2,559.9	2,577.1	2,876.2	3,760.2	3,821.7	4,157.1	3,520.0	3,515.2	3,845.2
September	2,629.9	2,572.2	2,843.2	3,916.9	3,745.5	4,124.6	3,567.5	3,532.7	3,637.0
October	2,762.1	2,596.4	2,906.8	4,063.1	3,838.4	4,467.9	3,758.5	3,567.6	4,105.9
November	2,237.3	2,360.8	2,573.1	3,400.1	3,584.0	3,993.0	3,066.3	3,062.5	3,384.3
December	2,125.9	2,129.4	2,362.3	3,424.7	3,313.3	3,737.8	2,907.0	2,899.9	3,175.0
TOTAL	30,031.9	28,795.3	31,249.0	45,169.0	44,408.6	47,441.6	41,582.4	39,968.7	42,283.4

BY AVERAGE WEEK

January	576.9	522.6	573.4	877.7	839.9	884.9	764.1	740.7	754.9
February	620.4	578.8	587.7	917.5	909.3	890.2	789.4	757.8	739.9
March	607.8	575.9	606.2	905.4	912.8	916.3	827.3	766.9	763.6
April	592.4	549.0	572.5	886.8	872.7	878.5	902.1	824.0	812.3
May	554.5	527.7	589.0	837.7	823.1	889.2	762.6	747.4	818.0
June	582.5	566.6	623.3	883.6	876.4	946.6	821.0	782.2	868.6
July	558.0	503.9	551.5	835.3	794.4	849.5	846.9	777.8	839.8
August	590.7	594.7	639.2	867.7	881.9	923.8	812.3	811.2	854.5
September	606.9	593.6	656.1	903.9	864.3	951.8	823.3	815.2	839.3
October	613.8	599.2	670.8	902.9	885.8	1,031.0	835.2	823.3	947.5
November	536.9	544.8	593.8	816.0	827.1	921.5	735.9	706.7	781.0
December	472.4	473.2	525.0	761.0	736.3	830.6	646.0	644.4	705.8
Average	577.5	553.8	600.9	868.6	854.0	912.3	799.7	768.6	813.1

CONTAINERBOARD PRODUCTION & CONSUMPTION

THOUSANDS OF TONS

CONTAINERBOARD PRODUCTION FOR DOMESTIC USE

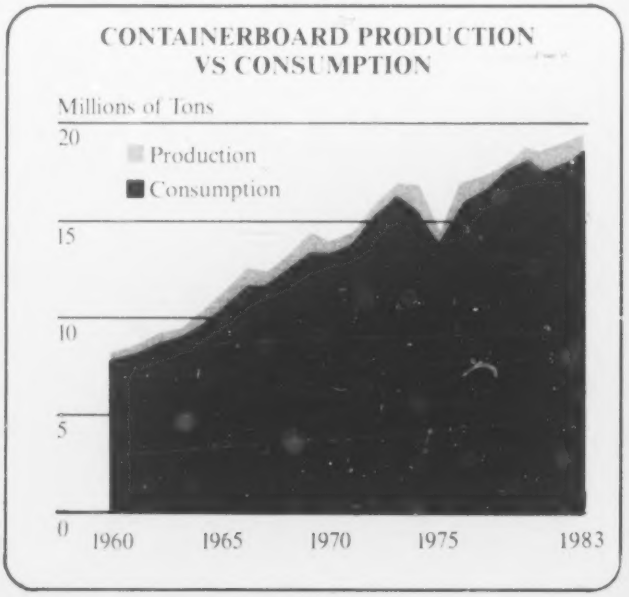
YEAR	TOTAL	LINERBOARD			CORRUGATING MATERIALS			Total Chip & Filler Boards
		Kraft	Recycled	Total	Semichemical & Kraft	Recycled	Total	
1960	8,186.6	4,731.2	743.6	5,474.8	1,788.9	672.1	2,461.0	250.8
1961	8,661.3	5,095.7	658.2	5,753.9	2,023.5	625.8	2,649.3	258.1
1962	9,299.0	5,514.7	701.8	6,216.5	2,188.8	633.3	2,822.1	260.4
1963	9,638.3	5,706.1	707.9	6,414.0	2,287.1	674.7	2,961.8	262.5
1964	10,341.9	6,188.0	719.5	6,907.5	2,447.4	717.7	3,165.1	269.3
1965	11,199.1	6,698.1	782.5	7,480.6	2,638.2	800.0	3,438.2	280.3
1966	12,459.6	7,550.2	797.1	8,347.3	2,909.8	890.0	3,799.8	312.5
1967	12,248.6	7,693.3	522.3	8,215.6	2,982.1	761.4	3,743.5	289.5
1968	13,388.4	8,612.2	431.5	9,043.7	3,371.2	690.7	4,061.9	282.8
1969	14,396.4	9,345.3	347.1	9,692.4	3,617.0	778.4	4,395.4	308.6
1970	13,964.3	9,133.4	269.7	9,403.1	3,404.7	859.3	4,264.0	297.2
1971	14,353.0	9,249.1	281.7	9,530.8	3,580.2	939.5	4,519.7	302.5
1972	16,019.0	10,577.6	278.9	10,856.5	3,874.2	972.3	4,846.5	315.9
1973	16,928.1	11,066.9	289.1	11,355.9	4,126.5	1,128.5	5,255.0	317.1
1974	16,767.0	10,838.4	467.1	11,305.4	4,010.3	1,169.0	5,179.2	282.3
1975	14,586.2	9,646.9	207.3	9,854.2	3,579.4	870.0	4,449.3	282.6
1976	16,700.2	11,093.2	282.7	11,375.9	3,986.5	1,075.1	5,061.5	262.9
1977	17,167.3	11,354.4	341.3	11,695.7	4,128.2	1,079.7	5,207.9	263.7
1978	17,909.2	11,877.2	256.4	12,133.7	4,305.3	1,197.7	5,503.1	271.5
1979	18,824.8	12,417.3	402.3	12,819.6	4,573.6	1,202.3	5,775.9	229.3
1980	18,070.2	11,948.6	444.5	12,393.1	4,398.5	1,047.1	5,445.6	231.5
1981	19,138.4	12,834.9	329.9	13,164.8	4,573.5	1,141.3	5,714.8	258.9
1982	17,675.0	11,813.0	255.9	12,068.9	4,200.7	1,155.7	5,356.4	249.7
1983*	19,280.5	12,959.4	286.5	13,245.9	4,532.1	1,301.9	5,834.0	200.6

*Preliminary. Source: Paperboard Group, American Paper Institute, Inc.

CONTAINERBOARD CONSUMPTION BY BOX PLANTS

YEAR	TOTAL	LINERBOARD	CORRUGATING MATERIALS	FILLER BOARD
1960	7,901.3	5,361.6	2,422.2	117.5
1961	8,293.9	5,634.1	2,547.8	112.0
1962	8,820.4	6,000.0	2,716.5	103.9
1963	9,300.7	6,327.4	2,881.9	91.4
1964	9,949.1	6,763.9	3,091.8	93.4
1965	10,735.7	7,315.8	3,327.5	92.4
1966	11,707.9	7,996.5	3,592.1	119.3
1967	11,752.0	8,022.3	3,626.7	103.0
1968	12,616.8	8,625.9	3,885.9	105.0
1969	13,487.2	9,229.2	4,166.3	91.7
1970	13,267.5	9,079.0	4,107.1	81.4
1971	13,806.8	9,465.2	4,273.4	68.2
1972	15,189.4	10,428.8	4,697.7	62.9
1973	16,446.4	11,315.1	5,059.7	71.6
1974	15,428.8	10,621.2	4,746.2	61.4
1975	13,975.4	9,609.1	4,320.2	46.1
1976	15,677.1	10,782.0	4,844.4	50.7
1977	16,464.1	11,318.3	5,102.5	43.3
1978	17,708.7	12,168.4	5,494.7	45.6
1979	18,159.7	12,456.0	5,654.5	49.2
1980	17,489.5	12,018.5	5,427.4	43.6
1981	17,821.2	12,262.4	5,530.4	28.4
1982	17,117.9	11,751.3	5,337.4	29.2
1983	18,395.7	12,594.4	5,767.7	33.6

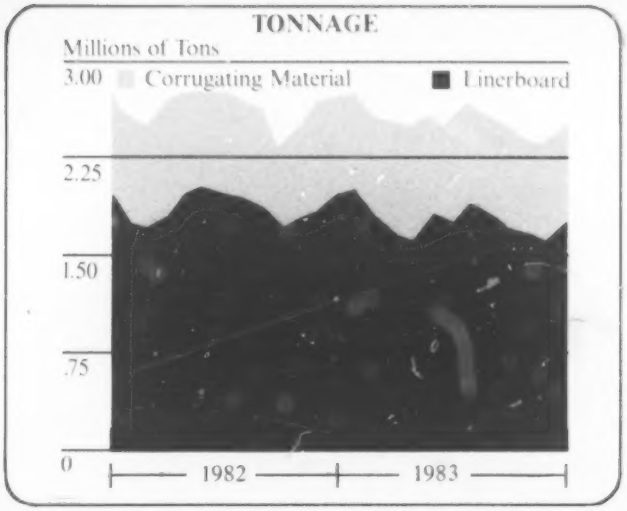
NOTE: The apparent disparity between containerboard production, consumption and inventories is attributable to two factors: (1) about 4% of production is diverted to other uses such as tube stock, composite cans, drums; (2) production includes container chip which is not consumed by container plants except as filler board consumed on solid fibre pasters.

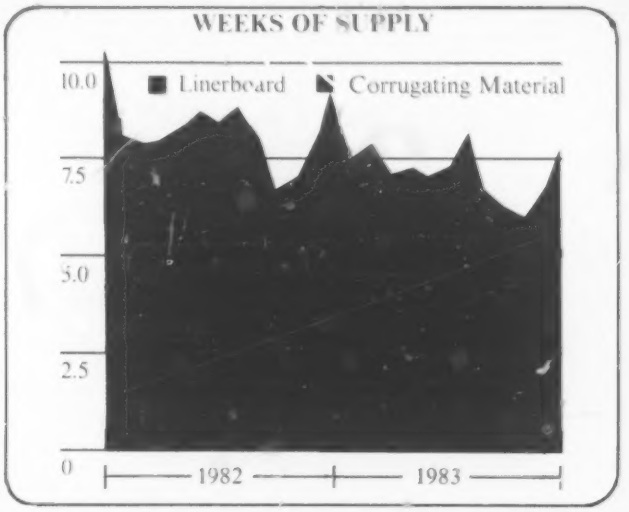


Definitions are shown on page 16.

CONTAINERBOARD INVENTORY

AT BOX PLANTS AND MILL SITES





Millions of Tons

TONNAGE AND WEEKS OF SUPPLY

1982	Jan 1	Feb 1	Mar 1	Apr 1	May 1	Jun 1	Jul 1	Aug 1	Sep 1	Oct 1	Nov 1	Dec 1	Jan 1
Linerboard:													1983
Box Plants	1,798.1	1,563.9	1,550.4	1,634.8	1,706.8	1,699.0	1,645.5	1,609.2	1,590.0	1,508.3	1,540.1	1,589.7	1,670.1
Mills	219.1	248.0	254.6	257.7	261.6	273.0	304.4	295.9	300.7	267.4	262.7	283.9	245.8
Total	2,017.2	1,811.9	1,805.0	1,892.5	1,968.4	1,972.0	1,949.9	1,905.1	1,890.7	1,775.7	1,802.8	1,873.6	1,915.9
Wks. of Supply	10.1	8.0	7.8	7.9	8.2	8.8	8.4	8.9	8.1	7.0	7.4	8.2	9.6
Corr. Mat'ls:													
Box Plants	671.0	616.3	603.9	617.1	630.8	625.5	630.6	624.1	599.6	560.2	573.5	604.5	631.7
Mills	32.8	46.1	50.7	53.6	51.1	57.3	60.3	56.4	52.7	47.4	38.7	35.7	26.6
Total	703.8	662.4	654.6	670.7	681.9	682.8	690.9	680.5	652.3	607.6	612.2	640.2	658.3
Wks. of Supply	7.8	6.4	6.2	6.2	6.2	6.7	6.6	6.9	6.2	5.3	5.6	6.1	7.2
Filler Board:	5.6	4.7	4.8	3.8	3.4	4.6	5.4	4.4	5.2	5.1	4.5	5.7	6.0
Total Contbd:	2,729.2	2,482.7	2,467.6	2,569.9	2,656.3	2,670.8	2,650.3	2,594.5	2,552.6	2,392.7	2,423.7	2,523.8	2,584.0
Wks. of Supply													
At Box Plants	8.5	6.6	6.4	6.5	6.7	7.1	6.8	7.2	6.4	5.6	6.0	6.6	7.9
At Mill Sites	.9	.9	.9	.9	.9	1.0	1.1	1.1	1.1	.9	.9	1.0	1.0
Total	9.4	7.5	7.3	7.4	7.6	8.1	7.9	8.3	7.5	6.5	6.9	7.6	8.9

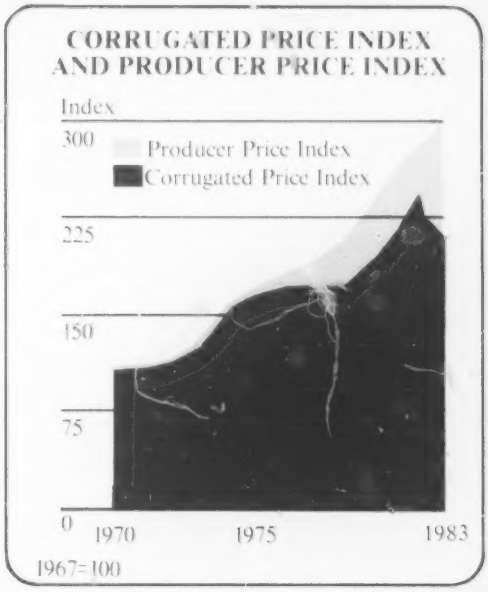
1983	Jan 1	Feb 1	Mar 1	Apr 1	May 1	Jun 1	Jul 1	Aug 1	Sep 1	Oct 1	Nov 1	Dec 1	Jan 1
Linerboard:													1984
Box Plants	1,670.1	1,544.1	1,529.4	1,545.2	1,600.5	1,564.5	1,603.6	1,591.4	1,556.5	1,523.1	1,516.0	1,597.7	1,630.1
Mills	245.8	258.5	244.1	223.9	241.2	251.2	255.5	253.8	236.7	221.3	211.9	218.1	179.6
Total	1,915.9	1,802.6	1,773.5	1,769.1	1,841.7	1,815.7	1,859.1	1,845.2	1,793.2	1,744.4	1,727.9	1,815.8	1,809.7
Wks. of Supply	9.6	7.5	7.6	7.3	7.4	7.3	7.4	8.0	7.2	6.5	6.4	7.2	7.8
Corr. Mat'ls:													
Box Plants	631.7	638.9	647.9	606.1	611.2	603.6	611.0	598.8	593.2	558.3	538.1	567.2	595.7
Mills	26.6	35.0	32.8	32.4	34.8	35.7	34.2	34.2	26.2	27.6	25.7	27.8	24.6
Total	658.3	673.9	680.7	638.5	646.0	639.3	645.2	633.0	619.4	585.9	563.8	595.0	620.3
Wks. of Supply	7.2	6.2	6.4	5.8	5.7	5.6	5.6	5.9	5.4	4.8	4.5	5.1	5.8
Filler Board:	6.0	5.4	4.7	4.9	5.4	6.5	5.0	5.4	6.7	5.7	6.7	4.4	6.5
Total Contbd:	2,584.0	2,485.2	2,461.5	2,414.4	2,495.3	2,463.4	2,511.3	2,486.3	2,421.3	2,339.2	2,301.5	2,415.4	2,436.7
Wks. of Supply													
At Box Plants	7.9	6.3	6.4	6.1	6.1	6.0	6.0	6.5	5.9	5.4	5.2	5.9	6.6
At Mill Sites	1.0	.8	.8	.7	.8	.8	.8	.9	.7	.6	.6	.6	.6
Total	8.9	7.1	7.2	6.8	6.9	6.8	6.8	7.4	6.6	6.0	5.8	6.5	7.2

Definitions are shown on page 16.

CORRUGATED PRICE INDEX

BY QUARTER

YEAR	1ST QTR	2ND QTR	3RD QTR	4TH QTR	YEAR	B.L.S. P.P.I.
1960	98.8	98.2	96.3	97.0	97.4	94.9
1961	95.7	94.0	90.6	94.5	93.4	94.5
1962	94.9	97.1	95.5	96.2	95.9	94.8
1963	95.1	94.0	92.9	95.5	94.1	94.5
1964	95.1	94.5	92.7	94.2	94.0	94.7
1965	93.8	93.9	92.8	96.3	94.3	96.6
1966	96.7	98.2	97.8	100.4	98.3	99.8
1967	100.7	100.2	98.6	100.4	100.0	100.0
1968	101.9	101.0	99.3	102.0	101.1	102.5
1969	102.4	[illegible]	102.3	105.1	103.3	106.5
1970	105.3	[illegible]	103.8	105.0	104.8	110.4
1971	104.4	104.7	103.4	104.1	104.2	113.9
1972	104.2	106.7	107.0	110.8	107.4	119.1
1973	114.1	120.2	124.7	129.8	122.5	134.7
1974	135.4	147.7	161.0	170.6	153.2	160.1
1975	168.1	166.0	163.7	165.0	165.5	174.9
1976	169.0	170.9	168.9	169.6	169.6	183.0
1977	167.4	168.2	168.6	168.4	168.2	194.2
1978	164.7	165.7	166.9	174.5	168.1	209.3
1979	178.6	187.3	190.3	199.6	188.9	235.6
1980	209.7	214.3	212.9	214.4	212.8	268.8
1981	222.8	232.5	232.4	232.6	230.0	293.4
1982	229.4	229.6	223.2	221.3	225.9	299.4
1983	217.3	218.6	217.2	224.8	219.5	303.1



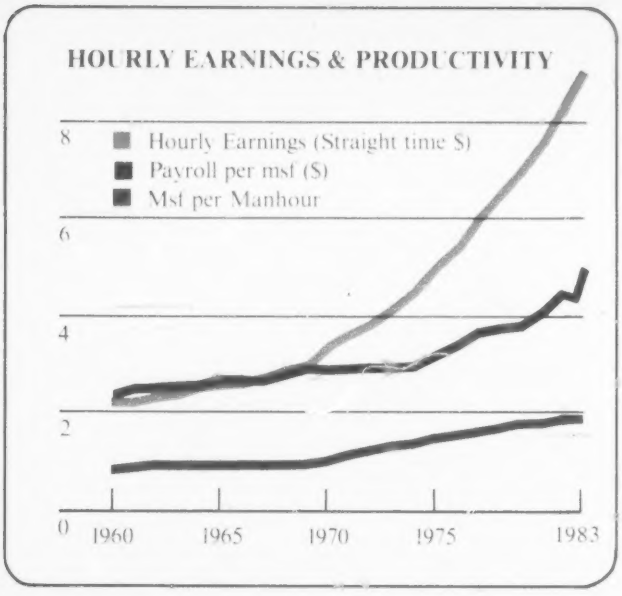
BY AREA

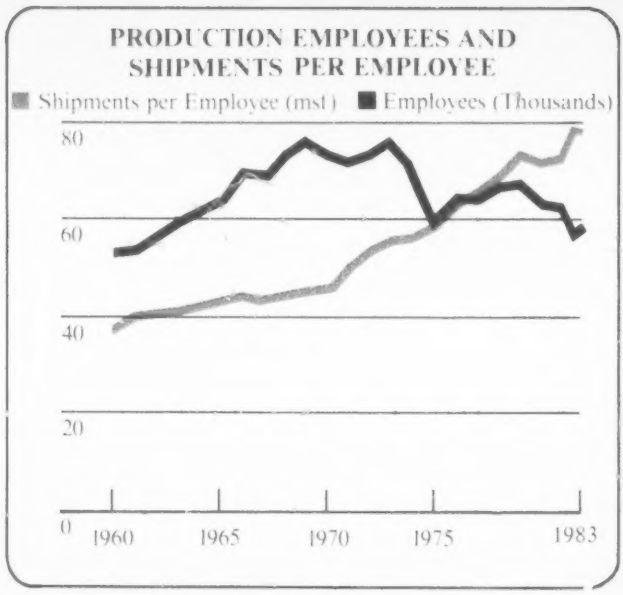
	Area One - Northeastern			Area Two - Southeastern			Area Three - East Central		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
1st Quarter	215.3	222.4	211.3	223.5	229.0	217.5	216.4	221.0	209.0
2nd	223.8	218.8	209.8	232.8	229.7	218.8	224.8	220.5	210.4
3rd	224.3	214.7	209.7	230.0	221.2	213.9	224.5	212.8	212.5
4th	225.2	213.5	217.8	232.7	220.5	227.5	224.1	212.0	219.8
YEAR	222.1	217.4	211.8	229.7	225.2	219.5	222.4	216.5	213.0

	Area Four - North Central			Area Five - South Central			Area Six - Western		
	1981	1982	1983	1981	1982	1983	1981	1982	1983
1st Quarter	224.9	230.6	217.1	221.2	223.2	210.0	242.9	257.9	246.8
2nd	234.4	227.4	216.0	228.4	222.0	210.4	257.9	265.5	253.2
3rd	232.6	219.5	215.4	226.4	213.9	207.1	263.3	262.0	252.6
4th	233.8	219.3	225.0	225.7	212.5	215.2	262.3	257.3	250.4
YEAR	231.3	224.2	218.4	225.0	218.0	210.6	256.7	260.7	250.9

Definitions are shown on page 16.

HOURS, EARNINGS AND PRODUCTIVITY





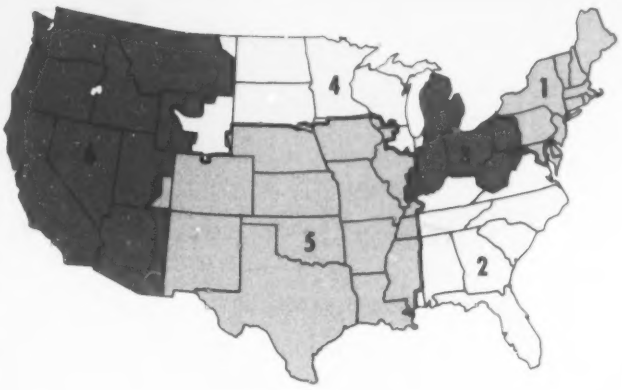
YEAR	Total No. of Employees	INDUSTRY AVERAGES							
		Hours per Week per Employee	Hourly Earnings			Earnings per Week per Employee	M Sq. Ft. Shipments per Wk. per Employee	Employee Hours per M Sq. Ft.	Payroll per M Sq. Ft. All Plants
			Total	Regular	Overtime				
1960	54,600	40.9	$2.224	$2.324	$3.238	$ 95.21	38.7	1.06	$2.46
1961	55,200	41.7	2.455	2.344	3.346	102.48	40.5	1.03	2.53
1962	57,400	41.5	2.529	2.418	3.435	104.82	41.4	1.00	2.53
1963	60,300	41.6	2.605	2.487	3.543	108.40	42.3	.98	2.56
1964	62,400	42.1	2.687	2.562	3.604	113.22	43.0	.98	2.63
1965	66,100	43.3	2.750	2.613	3.661	119.00	43.7	.99	2.72
1966	70,300	42.8	2.850	2.699	3.819	121.98	44.9	.95	2.71
1967	69,900	41.4	2.995	2.861	3.995	124.13	43.8	.95	2.84
1968	74,000	42.0	3.157	2.986	4.245	132.62	44.8	.94	2.96
1969	76,900	42.2	3.330	3.159	4.467	140.48	45.3	.93	3.10
1970	74,100	40.1	3.551	3.415	4.811	142.39	46.6	.86	3.06
1971	73,400	40.9	3.833	3.684	5.083	156.75	50.5	.81	3.10
1972	74,300	41.5	4.132	3.944	5.508	171.57	54.9	.76	3.13
1973	77,400	40.8	4.404	4.214	5.855	179.59	57.3	.71	3.13
1974	71,900	38.3	4.725	4.566	6.428	181.02	57.4	.67	3.16
1975	60,500	37.9	5.261	5.075	7.156	199.49	59.8	.63	3.33
1976	65,200	38.9	5.726	5.513	7.683	222.59	63.3	.61	3.52
1977	65,100	39.5	6.265	6.030	8.384	247.59	66.5	.59	3.72
1978	67,300	39.6	6.820	6.541	9.057	270.39	69.8	.57	3.88
1979	67,500	39.2	7.421	7.143	9.947	291.26	74.0	.53	3.94
1980	63,600	38.2	7.968	7.697	10.823	304.16	72.4	.53	4.20
1981	63,100	37.3	8.747	8.488	11.518	327.62	73.6	.51	4.45
1982*	59,100	36.8	9.340	9.081	12.537	343.78	74.4	.50	4.62
1983	59,600	37.8	10.220	9.935	12.777	386.45	79.9	.47	4.84

***Revised**

The reports received from the members are advanced to represent the entire industry. The employees represented are production workers, truckers, chauffeurs, watchmen, engineers, maintenance workers, etc. The total does not include executives, supervisors, salespersons, clerical and office employees. The footage includes the total shipments of all converting plants but not sheet plants; however, sheet plant labor costs are included. The above data covers only the direct payroll including pay for hours not worked. It does not include cost of pensions, medical insurance, etc.

Definitions are shown on page 16.

STATISTICAL AREAS



The Fibre Box Association has divided The United States into six Areas for statistical purposes.

Area 1—Northeastern
Area 2—Southeastern
Area 3—East Central
Area 4—North Central
Area 5—South Central
Area 6—Western

DEFINITIONS

Areas: The United States is divided into six statistical Areas. The boundaries of Areas 4, 5 and 6 were modified in 1980, and all prior-year data has been amended accordingly.

Average Week: An average work week for statistical purposes consists of six working days.

Basis Weight: The average weight of combined corrugated board per thousand square feet is derived by dividing containerboard consumption for corrugated board by corrugator production.

Containerboard: Paperboard components from which corrugated and solid fibreboard are manufactured.

Container Chip and Filler Board: Paperboard manufactured as a filler for solid fibre and paperboard for conversion into either single or multi-ply components for interior packing in corrugated or solid fibre boxes.

Converter and Sheet Plant: A converter makes corrugated board on one or more corrugating machines, and makes boxes from the board. A sheet plant buys corrugated board from a converting plant, and makes boxes from the board.

Corrugated Price Index: The Corrugated Price Index is developed by dividing the total dollars of sales of all corrugated products by the square footage of these products, based on member company data only. The price per M square feet of all corrugated products shipped by members is then converted to an index, 1967=100.

Corrugating Materials: Paperboard used as the fluted member of a corrugated product, usually .009 or .010 of an inch thick.

Corrugated Production: The actual total square footage produced on corrugators during the year. It differs from shipments in that production includes waste and trim before fabrication.

Filler Board: See Container Chip and Filler Board.

Industry: Any statistic termed "Industry," such as "Industry Shipments," is based upon information received from all manufacturers, both members and non-members of the Association.

Kraft Linerboard: Fiber furnish contains not less than eighty percent virgin sulphate woodpulp, produced by the kraft (sulphate) process.

Linerboard: Paperboard used as a facing on corrugated or solid fibre products.

Number of Plants: The data indicates the number of plants in each category which were in operation during all or any part of the year. This is not necessarily the number in operation at year-end.

Producer Price Index: The Bureau of Labor Statistics' Producer Price Index represents the wholesale prices of about 2,000 commodities, 1967=100.

Recycled Corrugating Material: Fiber furnish contains less than seventy-five percent virgin woodpulp.

Recycled Linerboard: Fiber furnish contains less than eighty percent virgin sulphate woodpulp.

Seasonally Adjusted Month: Actual shipments are seasonally adjusted using factors based on experience of the latest and preceding years.

Seasonal Adjustment: The adjustment factor is a composite of the seasonal factors and the regression trading day adjustment factors. The adjustment is continually revised; factors used in 1981 and 1982 are not identical to those used in 1983.

Semichemical Corrugating Material: Contains fiber furnish not less than seventy-five percent virgin woodpulp, produced by a semichemical process. Also includes kraft corrugating material in which the fiber furnish is not less than eighty percent virgin woodpulp that is produced by the kraft (sulphate) process.

Weeks of Supply: Obtained by dividing inventories by the average weekly usage in fibre box plants during the prior month excluding any holidays.